

ABSTRACT

A moving picture encoding apparatus in which a minimum picture quality may be maintained even though the bitrate of an output encoded datastream is changed. A real-time distribution system for moving pictures 1 includes a frame rate conversion unit 11 for controlling the frame rate of input moving picture data, an encoding unit 12 for encoding moving picture data, having a controlled frame rate, in accordance with the MPEG-4, a frame rate calculating unit 16 for calculating a setting value of the frame rate, a transmission unit 13 for transmitting /receiving data over a network, and a receiving unit 14. The receiving unit 14 detects the state of communication on the network and, based on the detected state of communication on the network, calculates a target bitrate. The encoding unit 12 controls the bitrate of the MPEG-4 datastream responsive to this target bitrate. The frame rate calculating unit 16 estimates the picture quality based on the quantization scale of the encoding unit 12 and, in case of deterioration of the picture quality to more than a preset level, lowers the frame rate.